

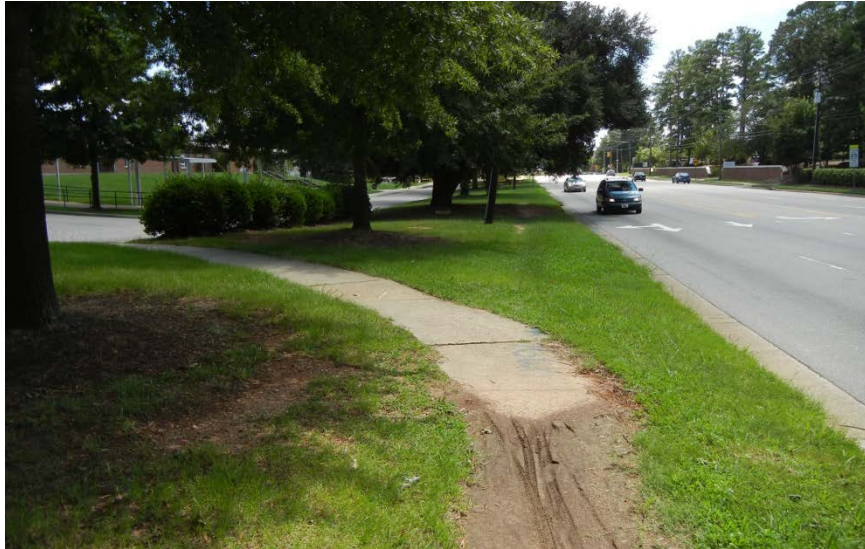
Agenda for the Evening:

1. Short recap describing differences with the new concept plan
2. Details and discussions provided at Topic Stations
3. Topic Stations include:
 - a) Streetscape Character Concept
 - b) Multi-modal and Roadway Concept
 - c) General Corridor Study Questions

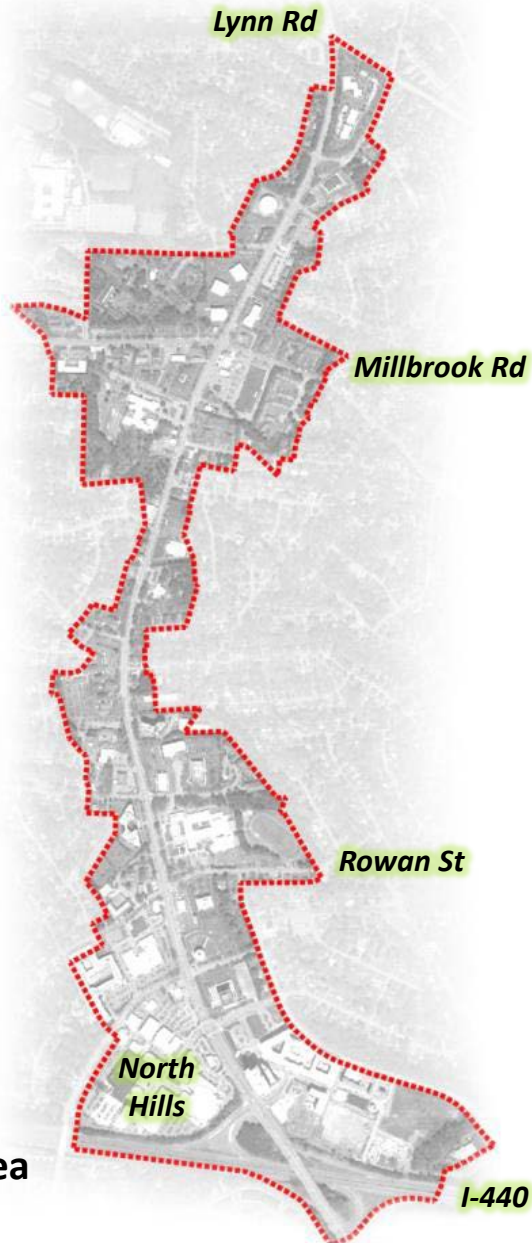
To help us get through this complex information and to answer all of your questions, we ask that all comments and questions about the plan be made at the topic stations, where experts are available to best address them.

Six Forks Road Corridor – Why are we here?

- Highly congested corridor
- Increasing development pressure
- Growing pedestrian demand
- Poor bicycle accessibility



Six Forks
Corridor
Study Area

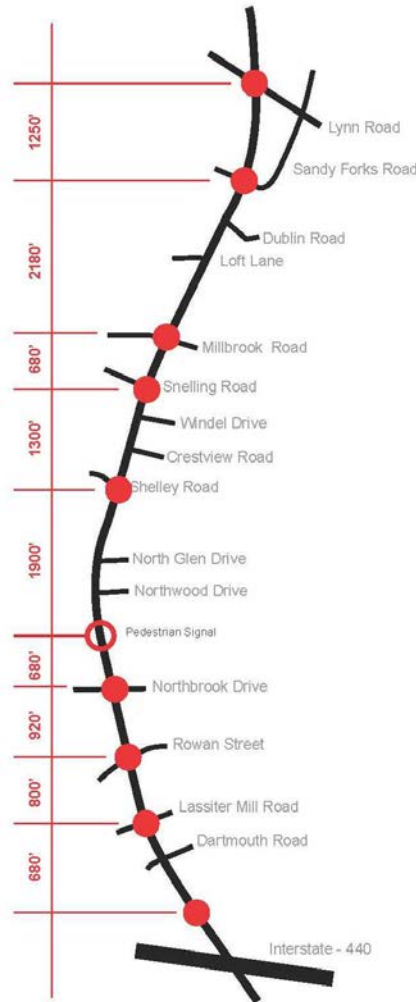


Corridor Vision – Goals (Recap)

- Improved traffic flow
- Environmental sensitivity
- Enhanced connectivity
- Multimodal transportation options
- Active pedestrian network
- Safety and accessibility
- Attractive urban thoroughfare
- Irresistible gathering place



Right-of-Way Widths



Intersection and Signal Spacing

Six Forks Road Corridor – Existing Conditions

- 2.3 miles long
- 29,000-48,000 vehicles/day
- 9 different cross sections
- 52' to 120'+ wide ROW
- Varying speed limits
 - 35 mph south of Millbrook
 - 45 mph north of Millbrook
- Crash rate is 2.68x state average
- Inconsistent intersection and signal spacing
- Lack of access control

DESIGN CONCEPT #2

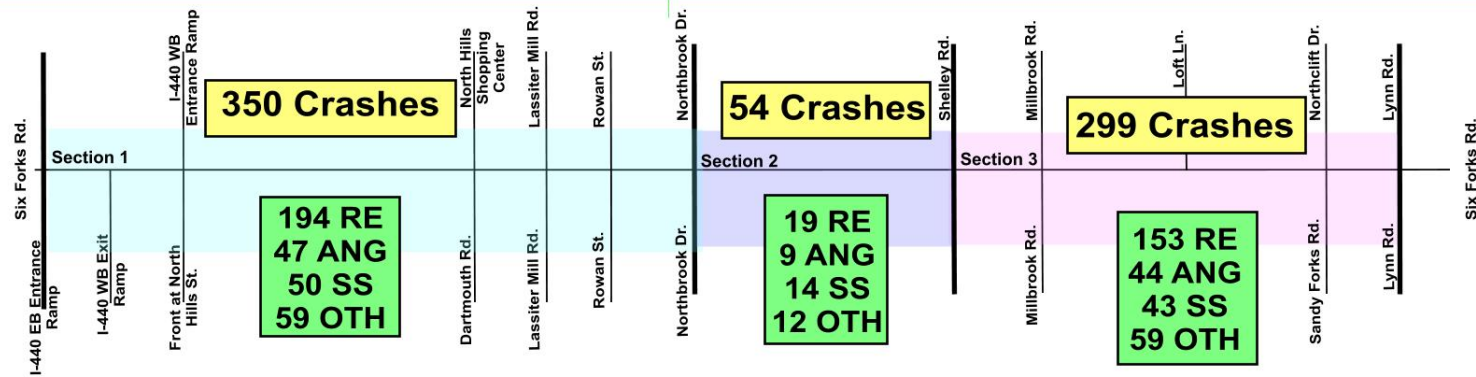


PROCESS RECAP:

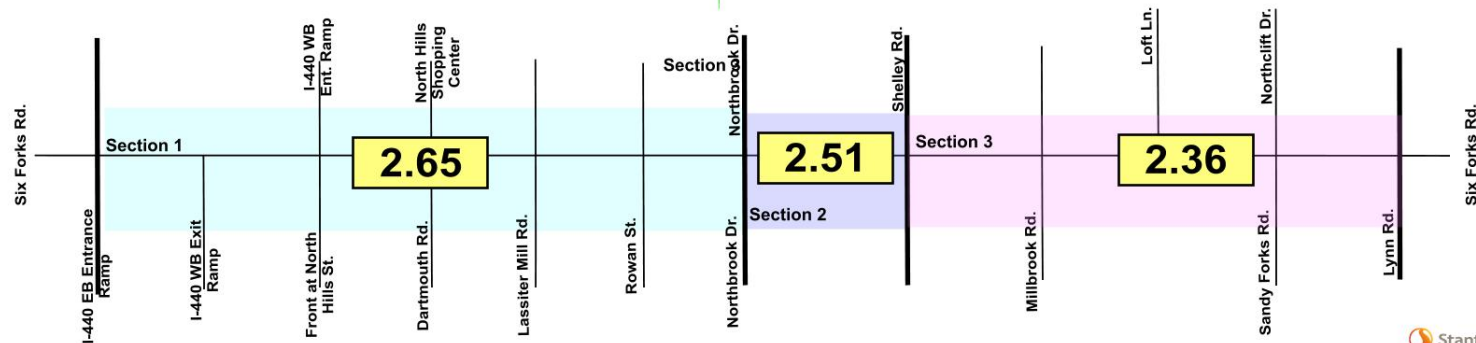
- Listening to community input
- Conducting technical analysis
- Working with agencies on technical requirements
- Responding to the realities of site
- Creating acceptable compromises, while holding onto the Vision
- Maximizing the outcome to create the most benefit for all interests
- Creating alternative plans for review and acceptance

We conducted professional analysis for how the current system functions for cars, bikes, pedestrians and buses

Existing Condition Crash Type Summary



Existing Condition Crash Severity Summary



RE - Rear-end Crash
 ANG - Angle Crash
 SS - Sideswipe, Same Direction Crash
 OTH - Other Crash Type



Six Forks Road from I-440 to Lynn Rd. in Raleigh
 Wake County, North Carolina



**EXISTING CONDITION
 CRASH TYPE SUMMARY
 CRASH SEVERITY SUMMARY**

We studied the context and potential issues related to space and construction

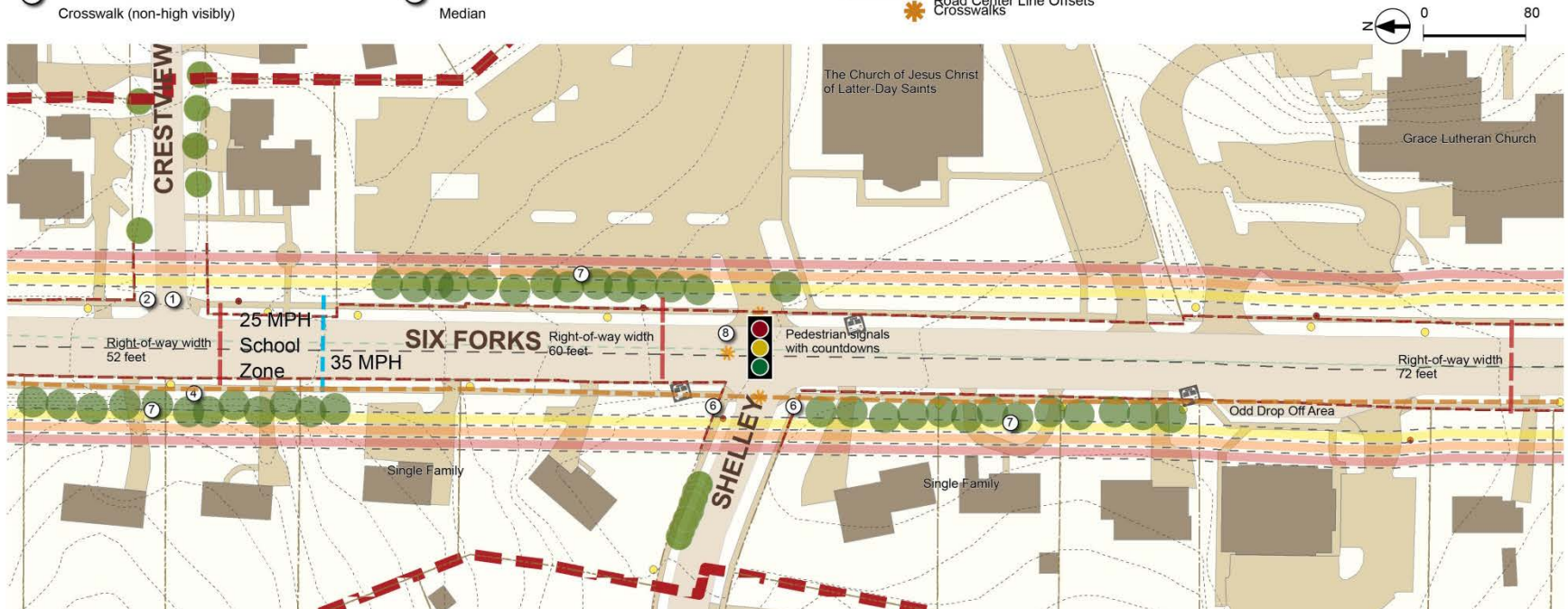
- | | |
|---|---|
| ① No existing crosswalks | ⑨ Fence |
| ② Ramps not ADA compliant | ⑩ Wall |
| ③ Power pole between sidewalk and curb | ⑪ Lighting on poles, 25' mounting height |
| ④ Narrow Sidewalk 5' or less | ⑫ Trees underneath and/or growing into power lines |
| ⑤ Wide curb cut for drive | ⑬ Irrelevant curb cut |
| ⑥ Above ground control cabinets | ⑭ Bus stop with shelter |
| ⑦ Large trees outside and on edge of right-of-way | ⑮ Topography that potentially will impact roadway expansion |
| ⑧ Crosswalk (non-high visibly) | ⑯ Median |

Legend

- Major power line route
- Current right-of-way
- Power pole
- Existing Street Trees
- Road Center Line Offsets
- Crosswalks

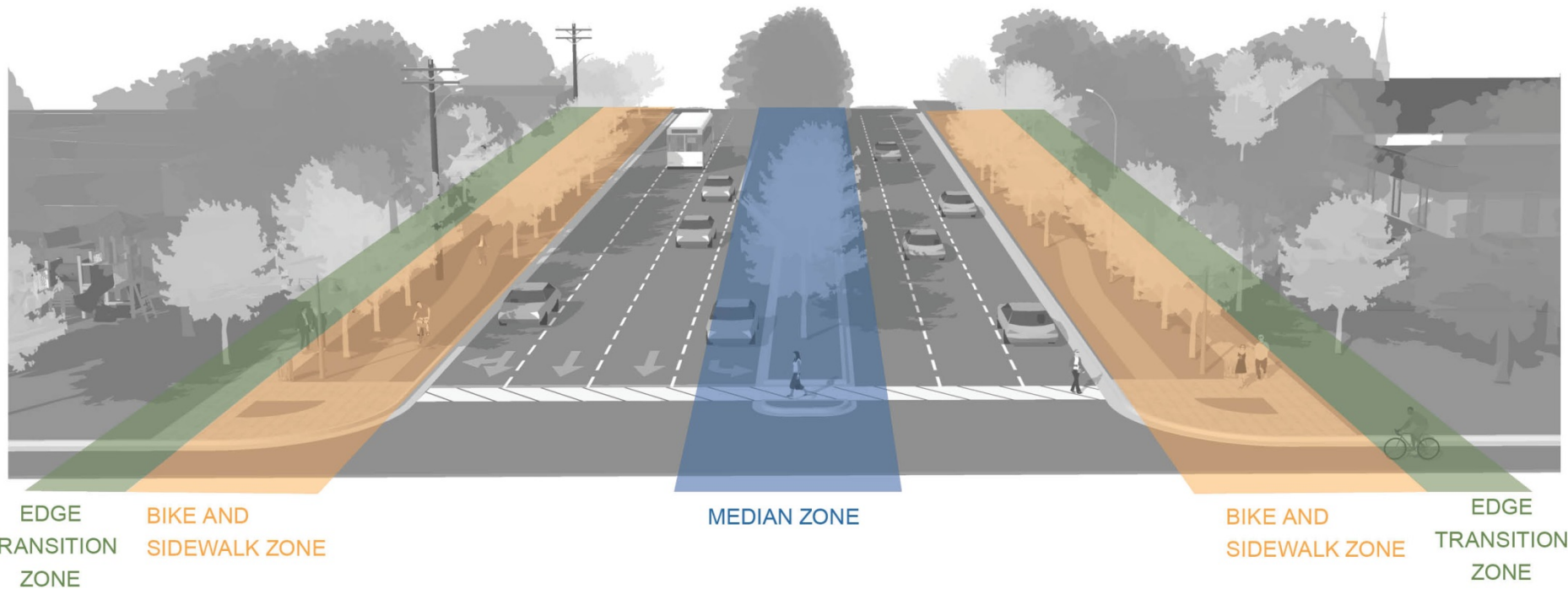
Notes

This middle section of the Corridor has more churches, schools and single family residential than any other section. Traffic can be briefly heavy Saturdays, Sundays and Wednesday evenings.



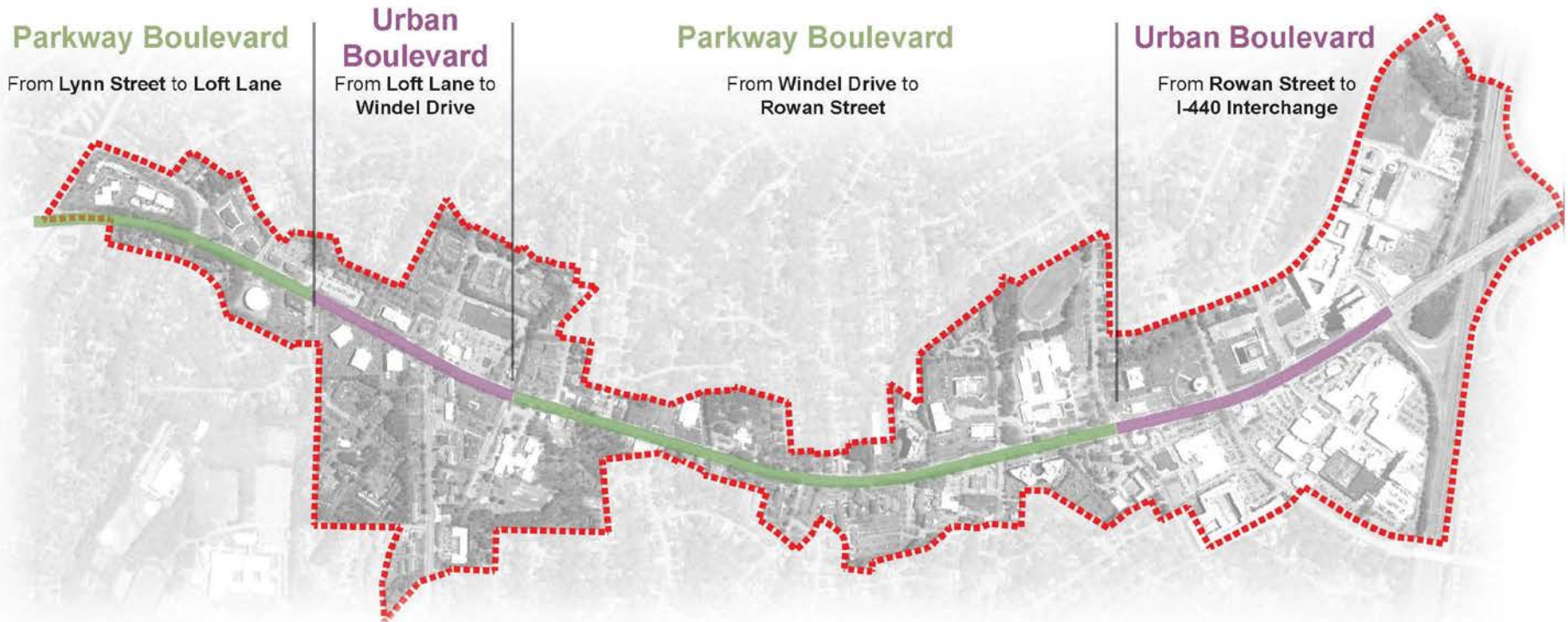
A NEW CONCEPT FOR THE SIX FORKS CORRIDOR

We accommodated all modes of travel in appropriately sized facilities that meet with demand; created safe, separated zones for bike and pedestrians; provided a landscaped and/or decorative median and created designs for the edge conditions



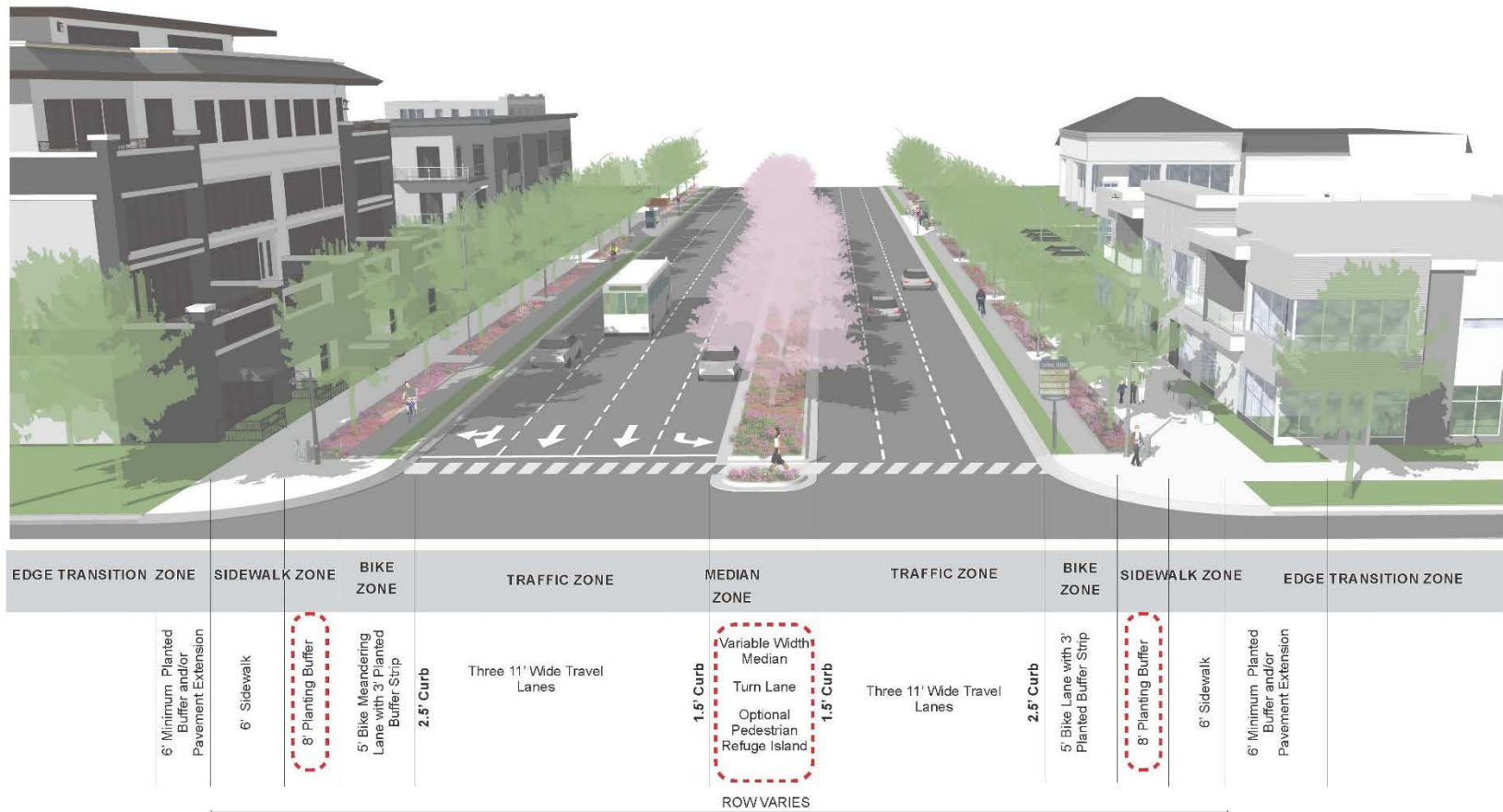
Two Distinct Streetscape Characters

- Each sensitive to the context it goes through
- Design concept remains the same

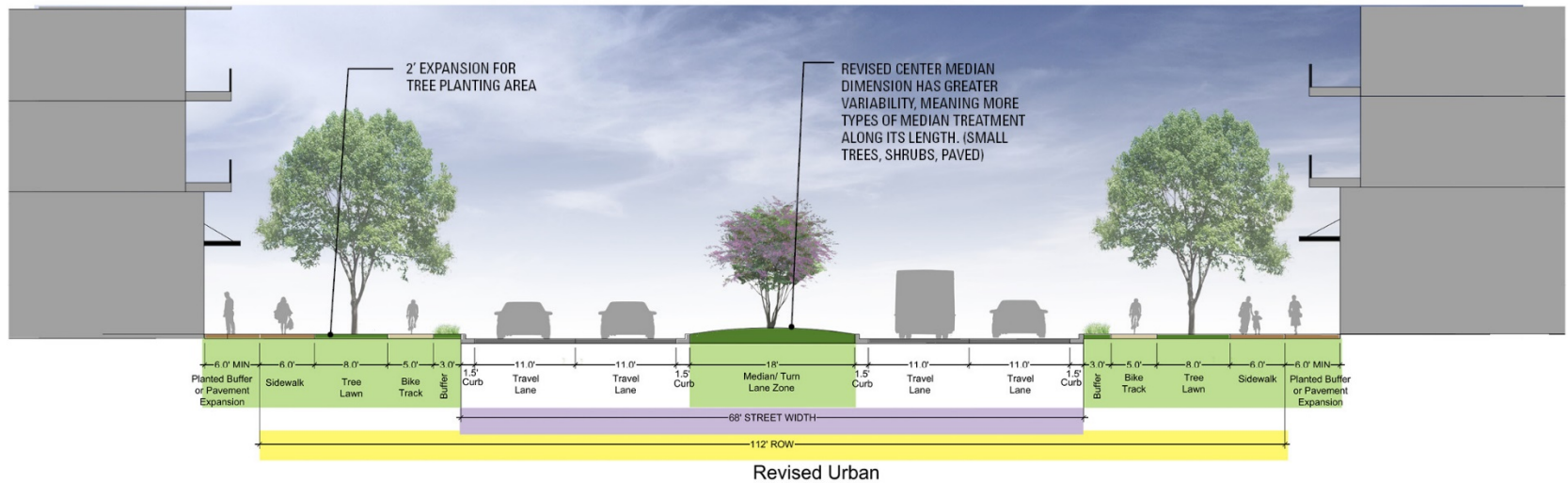
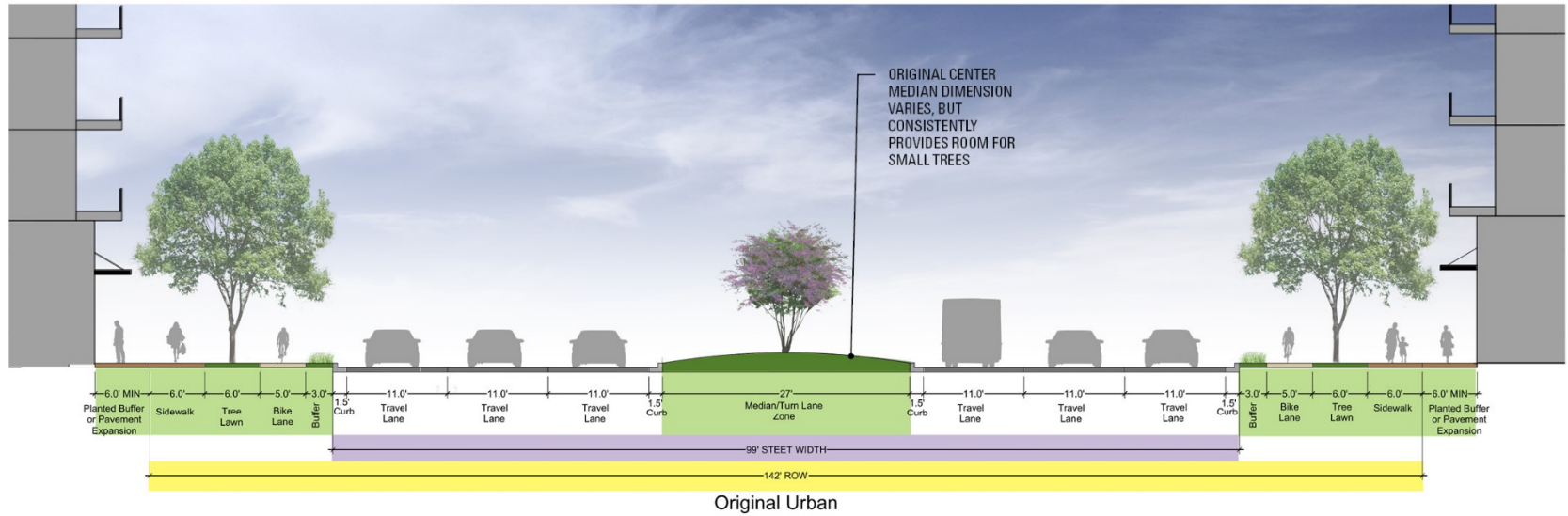


Urban Boulevard Streetscape Type

The “Urbanized” portion generally remains the same as previous schemes except for variances in the median dimension and materials and the size of the planting area



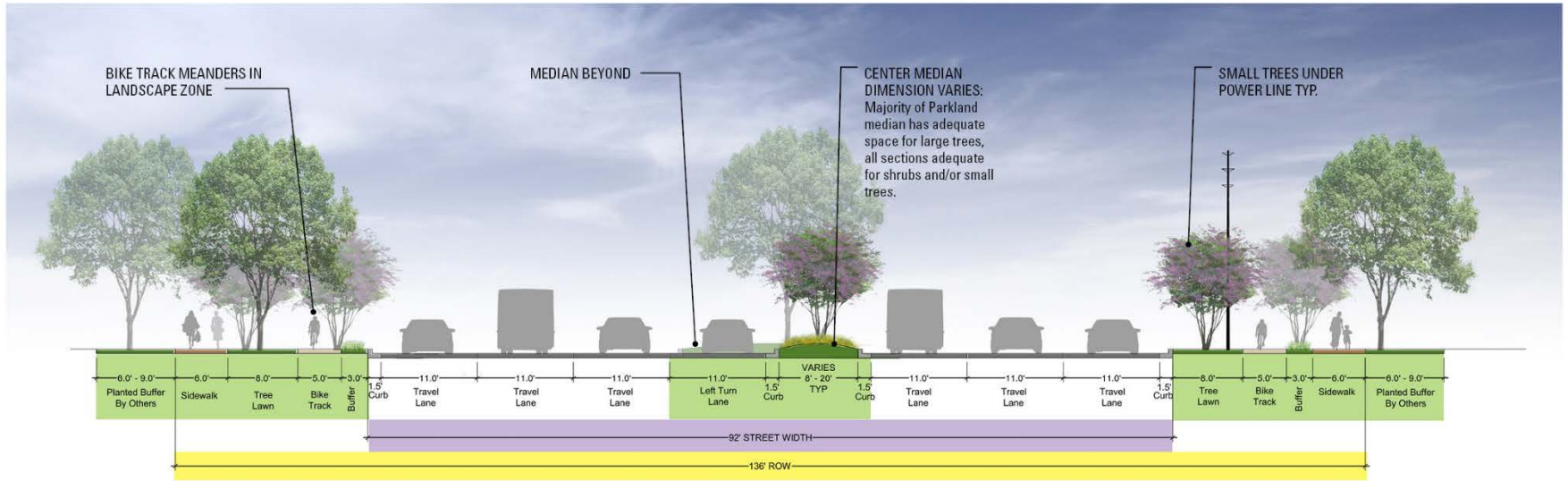
A NEW CONCEPT FOR THE SIX FORKS CORRIDOR



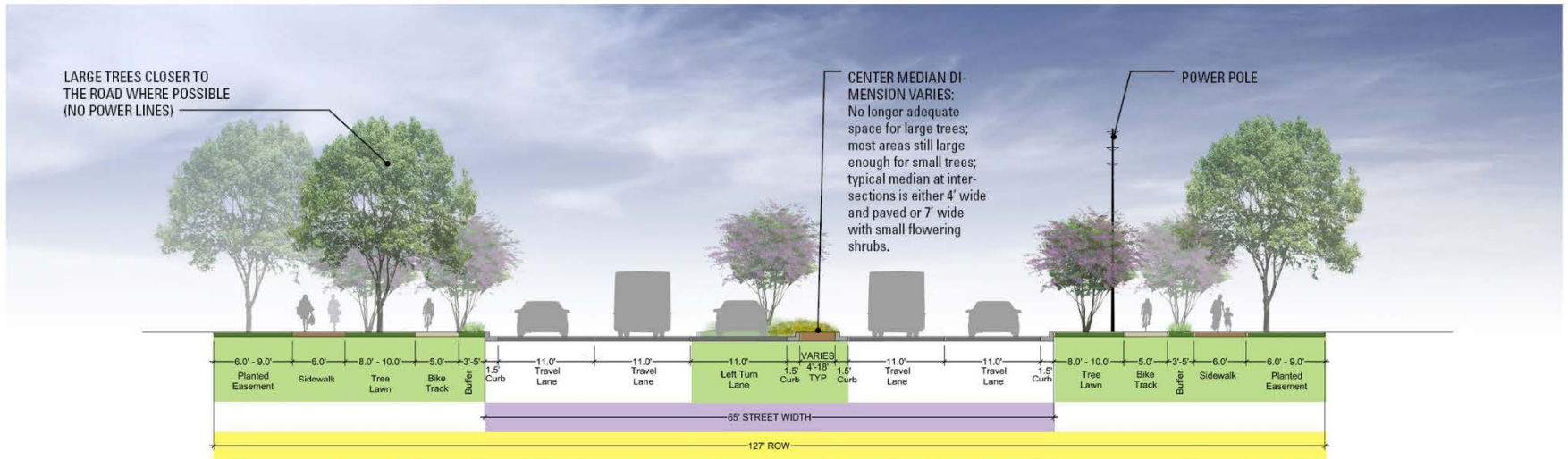
Between Millbrook Road and Loft Lane

DESIGN CONCEPT #2

A NEW CONCEPT FOR THE SIX FORKS CORRIDOR



Original Parkway



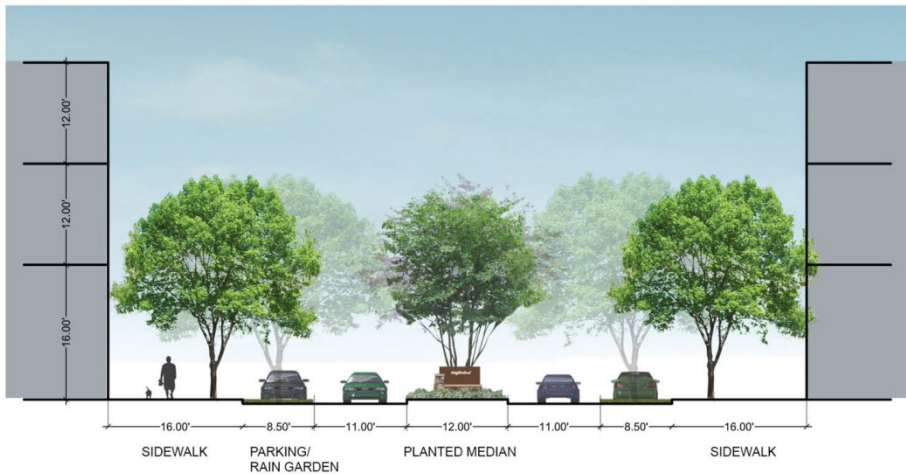
Revised Parkway

North Glen Drive Intersection

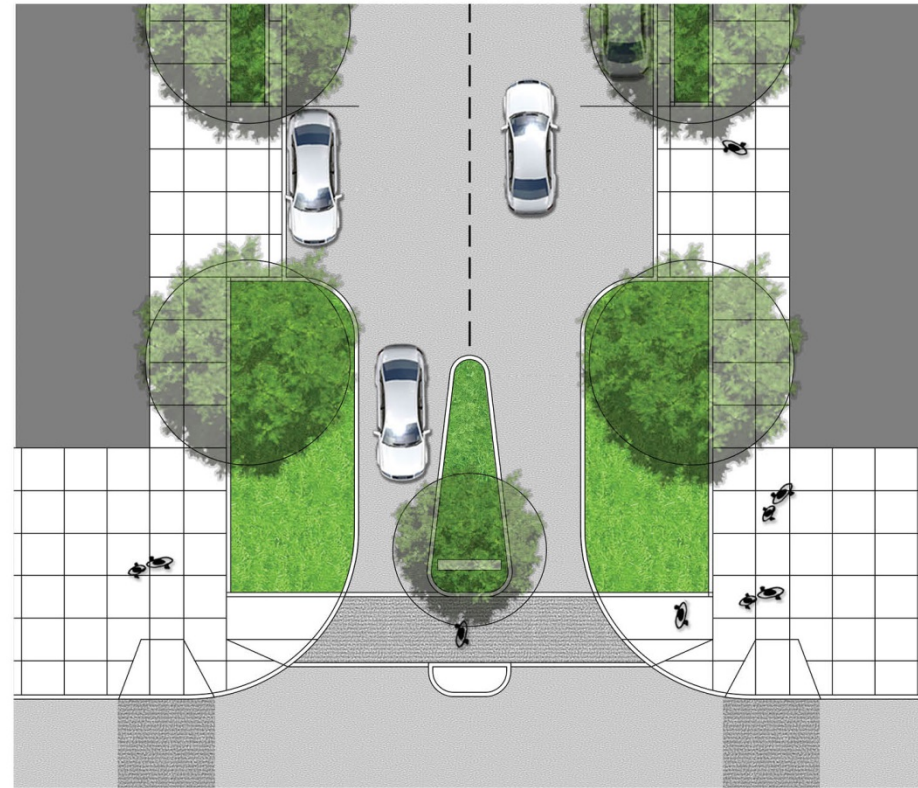
DESIGN CONCEPT #2

Neighborhood Gateways

The gateway concepts remain the same for the streets that access neighborhoods that promote pedestrian scale, neighborhood identity and traffic calming



Urban Boulevard Neighborhood Entry



Urban Boulevard Neighborhood Entry

Neighborhood gateways create places for artistic expression

DESIGN CONCEPT #2

Transit Stops (Remain the Same)

- Consolidate existing stops (●) to new enhanced stops (●) spaced for ¼-mile walking radius (○)
- New and attractive bus shelters with signage & furniture



Connectivity

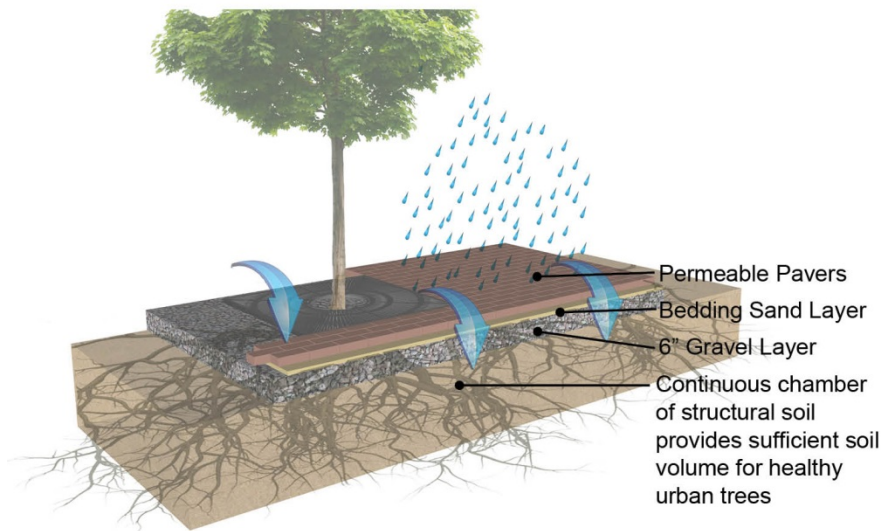
The plan for safe pedestrian and bicycle connectivity with enhanced crosswalks, pedestrian passes, and off-corridor improvements remains the same



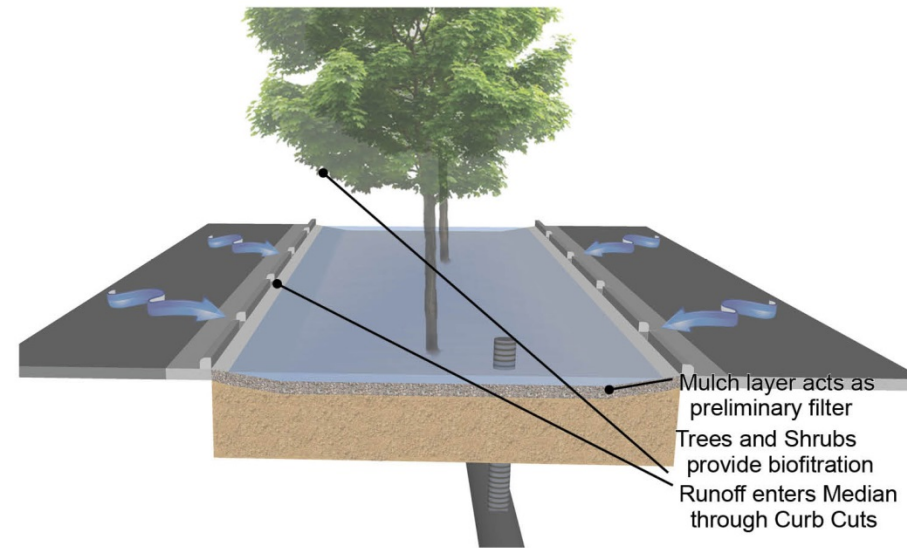
DESIGN CONCEPT #2

Environmental Sensitivity

Design Concepts that promote environment responsibility – particularly in the way that storm water is managed – remain the same in the current scheme



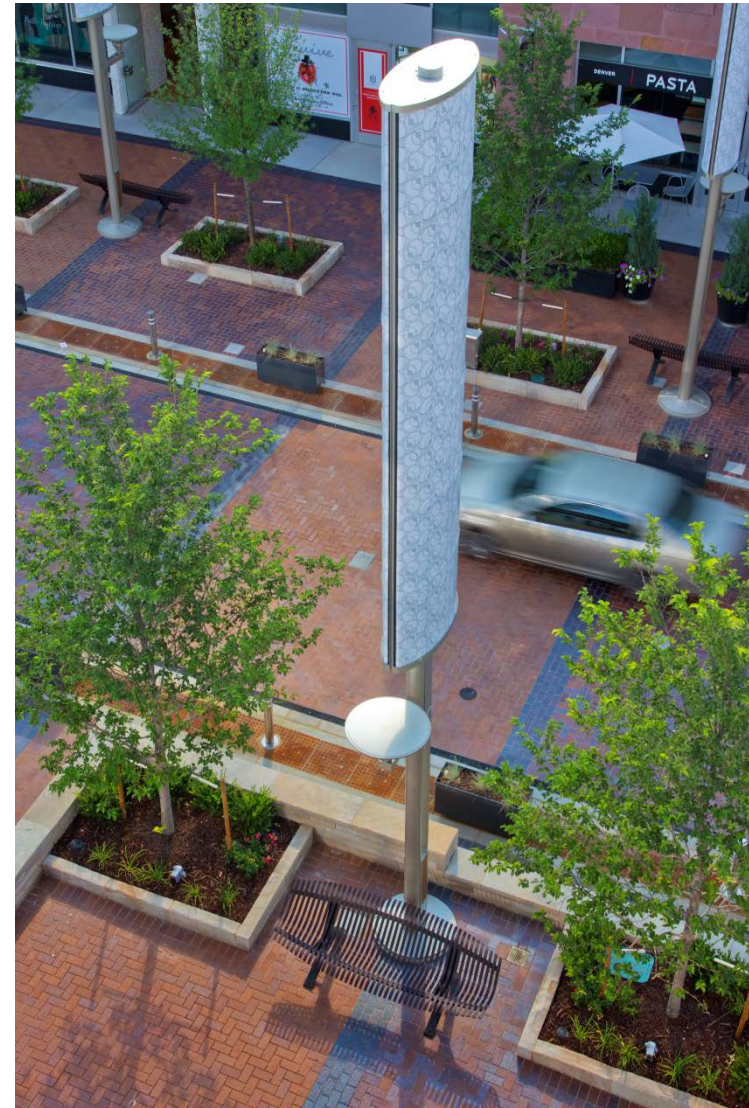
Permeable Pavers in Sidewalk Zone



20' Median with Stormwater Storage and Treatment Capabilities

Street Furnishings and Public Art

Recommendations about materials and furnishings and the inclusion of public art into the streetscape – both integrated into the design of elements and freestanding pieces remain the same in this scheme



A NEW CONCEPT FOR THE SIX FORKS CORRIDOR

We balanced the pros and cons of this alternative concept

ALTERNATIVE CONCEPTS COMPARISON

		5 Lane Section (Existing Condition)	6 Lane Section (Current Proposal)	4 Lane Section (Median, bike lanes and sidewalk)
Traffic	Vehicular Level of Service	The current level of service at the Millbrook Intersection is level F	All intersections would function at an acceptable LOS with a 6 lane divided cross section.	Most intersections would not function at an acceptable LOS similar to existing condition cross section
	Travel Time	The typical capacity of a 4-lane urban section is 26,000 vpd. 80% of the Corridor is currently over-capacity.	The typical capacity of a 6-lane divided urban section is 50,000 vpd. Only 20% the Corridor would be over-capacity by 2040.	The typical capacity of a 4-lane urban section is 26,000 vpd. 80% of the Corridor is currently over-capacity.
	Safety	Crashes along the Corridor are currently 2.8 times above the statewide average	Installation of a median can reduce crashes as much as 21%	Installation of a median can reduce crashes as much as 21%
Multimodal	Bike Infrastructure	Currently None	Buffered bike lanes provide space between cyclist and traffic, larger sidewalks accommodate children	Buffered bike lanes provide space between cyclist and traffic, larger sidewalks accommodate children
	Pedestrian Infrastructure	Sidewalks are narrow and close to the road, but are continuous along the entire Corridor except for one block	Wider sidewalks and street trees will create a more comfortable pedestrian experience	Wider sidewalks and street trees will create a more comfortable pedestrian experience
	Transit Infrastructure	Changing lane configurations make navigation for buses difficult, many stops but only a couple shelters	Simplified cross-section will make bus travel easier, section accommodates minimum space for future rail or BRT	Changing lane configurations make navigation for buses difficult, many stops but only a couple shelters
Neighborhoods	Aesthetics and Character	Minimal space for improvement, existing aesthetic condition not rated very high by the public	Increased space for landscape allows for opportunity to plant street trees and roadside plantings	Increased space for landscape allows for street trees at the edges and center of median - fewer large trees in median
	Edge Impact	Little to no impact	Major impact	Moderate to major impact, less ROW required to be purchased
	Connectivity	Free flow connectivity makes access easy for cars but creates a chaotic environment for motorists and pedestrians	Medians and enhanced crosswalks create a predictable roadscape for motorist and pedestrians	Medians and enhanced crosswalks create a predictable roadscape for motorist and pedestrians
Economics	Real Estate Value	No investment, properties will continue to develop at the current status quo	Moderate investment, moderate to major return	Moderate investment, moderate to major return
	Business Accessibility	Business access will not be impacted, perceptions of difficult right and left turns will continue	Business access will be organized allowing for businesses to be accessed by backstreet connection or at controlled intersection	Business access will be organized allowing for businesses to be accessed by backstreet connection or at controlled intersection
	Cost	Minimal Cost	Moderate to Major Cost	Moderate to Major Cost - less ROW required but edge treatments are still expensive

DESIGN CONCEPT #2

Level of Service/Delay Changes – 4 Lane Option

Location on Six Forks	Current AM	Current PM	New AM	New PM
Lynn Road	D (51.8)	E (68.7)	D (51.8)	E (70.9)
Sandy Forks Rd/Northclift Dr	D (36.8)	B (17.2)	D (39.1)	C (24.0)
Loft Lane*	C (23.9)	B (11.5)	A (4.7)	A (5.8)
Millbrook Road	F (97.1)	F (80.2)	F (94.8)	F (117.6)
Northbrook Drive	B (11.4)	D (40.7)	B (13.7)	E (66.7)
Rowan Street	A (9.3)	D (43.8)	B (10.3)	D (44.5)
Lassiter Mill Road	C (25.0)	D (47.6)	C (30.5)	E (63.2)

Delay = average seconds of delay per vehicle during peak rush hour

* Loft Lane is currently unsignalized

Conceptual Cost Comparison

Old Scheme - 6 Lane Option:

- 11.06 acres of r/w acquisition
- Total project cost - \$44.5 million

New Scheme - 4 Lane Option:

- 5.85 acres of r/w acquisition
- Total project cost - \$37.7 million



Measures of Success

- 3X the area for bikes, pedestrians and streetscape
- Consistent lane widths (11') and speed limit (35mph)
- 10 new high quality bus shelters
- 52 high visibility crosswalks
- Over 4 miles of grade separated bike lanes
- Over 4 miles of new wider sidewalks
- Almost 8 million gallons per year of stormwater runoff treatment
- Three new traffic signals
- Locations for over 700 canopy and flowering trees
- Less acres of medians planted with trees and more paved medians
- Plans for 10 neighborhood gateways
- Measurable increase in LOS for buses, bikes and pedestrians, but not for cars



Next Steps

- Feedback and questions at table stations
- Please fill out comment sheets
- Accepting feedback through April 21 – www.raleighnc.gov, keyword “Six Forks Corridor Study”
- Presentation at Midtown CAC on April 24
- Target date for City Council is mid-May

